

Fiscal Policy for Growth and Development in Tajikistan

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Abstract

Tajikistan's economy has recovered strongly after the collapse of the 1990s, but sustaining rapid economic growth over the long term and reducing poverty present major challenges for policymakers. This paper contributes to the debate over the strategic role for fiscal policy to play in meeting these challenges, utilizing the "fiscal space" approach to assess the long-term potential for expanding public provision of growth-promoting goods and services and evaluating the priorities for public spending. It also analyzes the long-term risks to fiscal sustainability, from external public debt and the quasi

fiscal deficit of the electricity sector. The paper contends that institutional reforms in key areas, notably public financial management, tax administration, and the energy sector, are crucial for generating fiscal space and for ensuring that higher levels of public spending are translated into stronger economic growth and poverty reduction. The priorities for government spending should be education, health, and the maintenance of the core networks of the existing infrastructure for energy and transport, rather than new public investment projects.

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Fiscal Policy for Growth and Development in Tajikistan

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1. Introduction

This paper analyzes how fiscal policy can best contribute to sustainable long-term economic growth and poverty reduction in Tajikistan, a low-income economy which has only partially recovered from a severe economic collapse after the break-up of the Soviet Union in 1991. Per capita incomes in Tajikistan are the equivalent of only \$350 per annum, the incidence of poverty is estimated at 64% and a third of children suffer from chronic malnutrition. The provision of basic social services, such as education and health care, has deteriorated dramatically because of the contraction of budgetary resources available to fund them. To eradicate mass poverty it will be necessary to maintain high rates of economic growth, with the benefits equitably distributed, and to rebuild basic public services. Although Tajikistan has recorded high rates of real GDP growth in the 2000s (averaging almost 9%), it is unlikely that these can be sustained over the long term without a strong rise in private investment and an improvement in labor productivity.

The main arguments of the paper are that fiscal policy should focus on halting the deterioration of human capital, by allocating greater resources to recurrent expenditures in the education and health sectors, while at the same time ensuring that macroeconomic stability is not jeopardized by higher domestic borrowing or that fiscal sustainability is not threatened by excessive external borrowing for capital projects. Government expenditures on infrastructure should be focused on providing adequate maintenance for the core components of the existing infrastructure, rather than on new capital investments. Although there is some scope for improving public services by increasing the efficiency of government expenditures, creating sufficient fiscal space for all of the priority expenditures will require an expansion of budgetary resources. Strengthening tax administration offers the most feasible route to enhance budgetary resources without undermining macroeconomic stability or debt sustainability. While increasing expenditures in key social sectors should be a priority, at least as important is improving the allocation of public expenditures and strengthening all aspects of public financial management (PFM). The paper also highlights the need to tackle threats to fiscal sustainability from the huge quasi fiscal deficits in the energy sector.

The approach adopted in this paper is to first review the recent performance of the economy and of fiscal policy (section 2). The paper then identifies the main constraints to economic growth and poverty reduction in Tajikistan (section 3) and examines the role which fiscal policy should play in alleviating these constraints, including the priorities for public spending (section 4). Section 5 discusses the possibilities for improving the output of public services in the priority areas through improvements in the efficiency of expenditure, changes in the sectoral allocation of the budget and an expansion of the budget. This is followed in section 6 by an analysis of the scope for mobilizing additional budgetary resources for priority expenditures from higher domestic revenues, donor grants and government borrowing. Section 7 discusses the quasi fiscal deficit in the electricity sector, which is one of the most serious threats to long-term growth and fiscal sustainability. The paper concludes in section 8 by drawing together the implications for the design of fiscal policy.

2. Review of Recent Economic and Fiscal Performance

Tajikistan's economy followed a similar path to those of the other Commonwealth of Independent States (CIS) following the break up of the Soviet Union in 1991, notably a very steep decline in output followed by a recovery beginning in the second half of the 1990s.

Large fiscal deficits were incurred in the first half of the 1990s, financed almost entirely by credits from the central bank, which fuelled hyperinflation. In addition, quasi fiscal deficits led to a sharp build up of government and government guaranteed external debt, caused mainly by the government financing imports of commodities from Russia and other CIS countries. Serious economic reform began in the second half of the 1990s, with the government embarking on an ESAF program in 1998. The fiscal deficit was reduced from 11% of GDP in 1995 to an average of just under 3% of GDP in the final four years of the 1990s and domestic financing of the fiscal deficit

was cut to an average of 1% of GDP in this period (see figure 1).² As a result the broad money growth rate was brought down in the second half of the 1990s, which enabled inflation to be reduced to 30% by 1999. The reduction in the fiscal deficit in the second half of the 1990s was achieved by cutting government expenditures sharply, by 40% in real terms: between 1995 and 1999. Cuts in bread subsidies, which had amounted to nearly 10% of GDP in 1995, accounted for a large part of the cut in expenditures.³

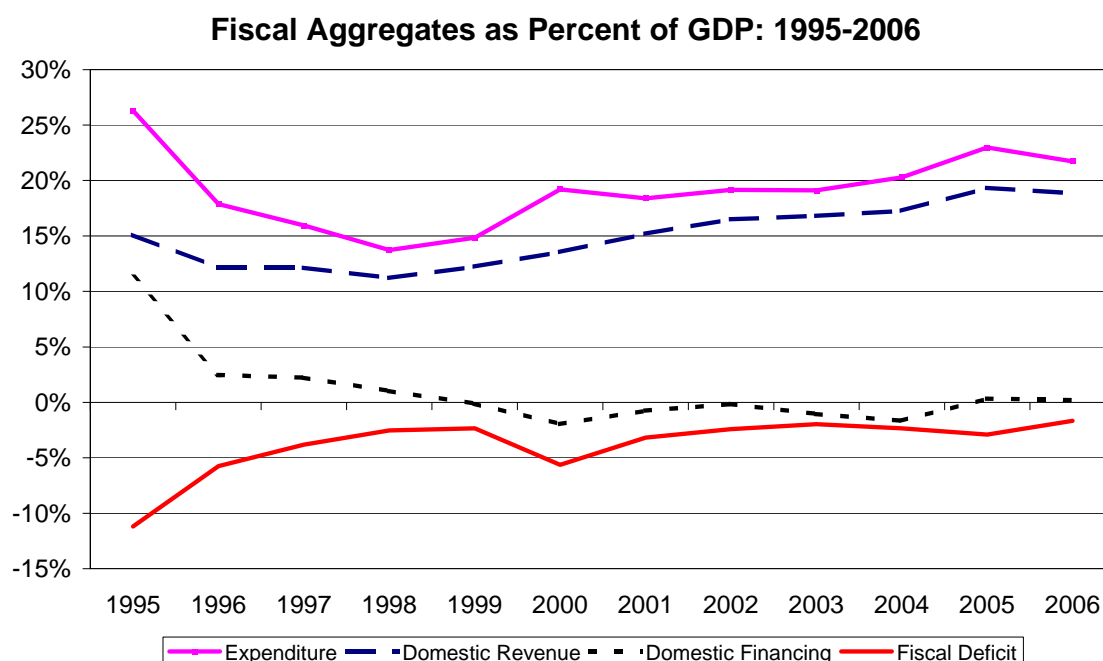
Real GDP growth, which had begun to recover in 1997, accelerated in the 2000s, averaging 9% per annum during 2000-2005. The economic recovery was driven by a recovery in total factor productivity (TFP) growth (Matovu, 2005). The collapse of output in the first half of the 1990s left large sections of the capital stock under-utilized, and once this capacity was brought back into production output was able to recover rapidly without the need for new investment. In fact capital investment rates remained low, even after the economy began to recover: gross fixed capital formation averaged only 12.5% of GDP during 1996-2005, a level which was barely high enough to generate any growth in the capital stock. Despite the strong recovery in the 2000s, output is still below the level it had reached in 1990.

Strong growth, better tax administration and a change in the method for determining VAT boosted domestic revenues, which rose by more than 6% of GDP from 1999 to 2006. This allowed government expenditures to increase while maintaining the overall fiscal deficit at an average of 3% of GDP during 1995-2006, and avoiding virtually any resort to domestic financing of the deficit. Primary government expenditures rose from 13% of GDP in 1998 to 21.7% of GDP in 2006. Debt relief from Russia and Pakistan in 2004 and from the Multilateral Debt Relief Initiative (MDRI) in 2006 sharply reduced the external debt burden.

Figure 1

² These deficits are on a cash basis. There were substantial expenditure and revenue arrears, but the lack of a proper treasury system impeded the accurate reporting of these arrears.

³ Bread subsidies were replaced by cash transfers, but substantial arrears were accumulated on these transfer payments.



Source: IMF

Given that the economy has begun to recover strongly from the contraction of the first half of the 1990s, it is pertinent to ask what role fiscal policy played in the recovery. The main channel through which fiscal policy supported the economic recovery was through improved macroeconomic stability brought about by fiscal adjustment. The strong GDP growth achieved during the 2000s was preceded by a substantial fiscal adjustment in the second half of the 1990s, which enabled government to cut its domestic borrowing sharply. Segura-Ubiergo, Simone and Gupta (2006) examined the relationship between fiscal adjustment and growth in CIS countries during the period 1992-2001, finding a strong correlation between fiscal adjustment and growth in those countries which needed to attain macroeconomic stability. They hypothesize that fiscal adjustment in the CIS countries boosted economic growth through two channels; the reduction in government borrowing requirements and associated monetization of deficits, and a credibility effect which signaled government commitment to macroeconomic stability and sound fiscal policy. This in turn stimulated an expansion of official and private capital inflows (boosted in the case of Tajikistan by workers' remittances) that at least partly substituted for the loss of

transfers from the Soviet Union and helped to restore aggregate demand, mainly through an expansion of consumption.

3. Growth and Development Challenges and Constraints

The key long-term challenges for development policy in Tajikistan are to sustain rapid economic growth, to ensure that the benefits of this growth are equitably distributed, which requires growth of labor intensive production to create more employment, and to reverse the deterioration in social indicators, notably in educational attainment and health status that has taken place since the country became independent. The type of growth that has occurred during the 2000s, characterized by a shift back towards the economy's production possibility frontier, is unlikely to continue for much longer. Sustainable long-term growth will require increased investment and improvements in labor productivity to boost the supply side of the economy.

In common with other CIS countries, Tajikistan inherited a large capital stock relative to the size of its economy from the Soviet era; hence the economy is capital intensive for a low-income country. However much of the capital stock is in the public sector and is not well suited for a market economy. Tajikistan needs more investment, but the priority should be private investment in marketable goods and services, such as non traditional exports and services for domestic consumption. Private investment has been very low; amounting to only 5-6% of GDP during 2003-2006.⁴

While the macroeconomic environment for private investment has improved markedly, some of the institutional features of the investment environment are a major constraint to private investment, as shown by business surveys such as the 2005 Business Environment and Enterprise Survey (BEEPs). The business climate is characterized by unpredictability, a lack of transparency and an uneven playing field for businesses. Instead of a clear set of rules for all businesses, individual firms make their own special arrangements with government officials (World Bank, 2005D: 22-

⁴ This estimate is from the IMF, and probably includes an element of investment by public enterprises.

24). Excessive and complex regulations are a barrier to entry by start up businesses and a burden on existing firms. The government has begun to implement measures to address some of these problems: Parliament enacted and amended legislation in 2005 and 2006 to streamline licensing procedures and reduce the number of activities which are subject to licensing, but there is still much to be done to improve the investment climate.

The level and structure of taxes in Tajikistan do not appear to be a major constraint to economic growth. The overall tax burden is relatively moderate: taxes amounted to only 16.6% of GDP in 2005. It is unlikely that income tax rates impose serious disincentives: The corporate income tax rate of 25% is not out of line with international rates, while small businesses pay a tax rate of 12%. Tax administration, however, is more problematic, and allows too much scope for discretionary decisions and predatory behavior on the part of tax officials and the tax police. The BEEPS reported that 80% of businesses paid bribes to tax inspectors (World Bank, 2005A: 17). The tax police are not compatible with modern tax administration practices which are based on self-assessment: Instead the existence of a separate tax agency which lacks the specialist tax skills needed for tax administration but which has close contact with taxpayers encourages corruption (Summers and Baer, 2003: 24). Customs procedures are very inefficient and are cited by traders as their biggest problem. Customs clearance takes between three and 28 days and requires 60 different administrative steps for imports and 40 for exports (World Bank, 2005D).

Is more public investment needed to boost economic growth? The country already has a large stock of public infrastructure assets, and in many respects infrastructure assets are over-dimensioned for the size of the economy (World Bank, 2006). For example, Tajikistan's production and consumption of electricity per capita is far higher than would be expected for a low-income country. However, some of the public infrastructure is not especially well suited to complement private sector activity; for example, the existing roads were not built for heavy trucks (the rail system carried most of the heavy goods during the Soviet era). Nevertheless, there is little evidence to indicate that the inadequacies of the transport infrastructure are a major constraint to private investment. In the 2005 BEEPS, only 2% of businesses in Tajikistan cited transportation as a major obstacle for the growth and operation of their business,

while only 11% of businesses cited it as a moderate obstacle (World Bank, 2006: Annex 1). World Bank (2004B) examines constraints to trade in Central Asia and concludes that the road networks in the region are relatively extensive and largely sufficient to meet the needs of users, although roads are in poor condition because of inadequate maintenance. It argues that these countries should focus on the maintenance of existing roads, focusing on the core road networks that can be maintained on a sustainable basis within the resources available in each country.

Investment in hydroelectric power generation, mainly for export, could make an important contribution to economic growth. Tajikistan has enormous hydropower potential and neighbors countries which are energy scarce and are potential export markets. However, while hydropower exports could boost GDP growth, foreign exchange earnings and government revenue, they will create very few jobs in the long run, once the construction of these projects is completed, and hence make little direct contribution to poverty reduction.

Improving labor productivity is also necessary to sustain long-term growth. Tajikistan has the lowest labor productivity among CIS countries, although this may reflect other factors besides the quality of the workforce, such as the high cost of doing business in the country (World Bank, 2005D: 3). Since independence, the quality of the labor force has been undermined for two reasons. First, educational attainments have deteriorated, as measured by falling school enrolment and completion rates. It is also likely that the quality of education which pupils receive in schools has deteriorated sharply, although it is difficult to measure this. The main reason for this is the paucity of resources allocated to public education, as a result of which teachers are very badly paid (and often absent from work), there are shortages of teaching materials and school buildings cannot be properly maintained. Secondly, many of the most productive workers have left the country. Many ethnic Russians, who comprised a large share of the professional cadres in Tajikistan, left the country in the 1990s. More recently many Tajik citizens have migrated to work in Russia, where wages are much higher than in Tajikistan; about a third of all males of working age now work outside the country on a permanent or seasonal basis (World Bank, 2005D: 58).

4. Implications for Fiscal Policy and Public Sector Outputs

The assessment of the constraints to growth in section 3 has clear implications for public expenditure policies. Firstly, there is a need to strengthen public provision of basic services such as education and health, which both directly improve the welfare of the population and enhance human capital, thereby contributing to the long-term growth of labor productivity. Given the very low income levels of the majority of Tajikistan's population, it is unlikely that private sector provision of education and health services, paid for by the consumers, can meet the country's needs.

Secondly, new investments in public infrastructure (e.g. transport systems and utilities) should not be a high priority because the country is already relatively well endowed, for a low-income country, with public infrastructure and there is little evidence to indicate that inadequate infrastructure constitutes a serious constraint to growth. Moreover, the government does not have the budgetary resources to maintain the existing public capital stock properly, let alone an expanded stock of public capital. Therefore, instead of investing scarce budgetary resources in new capital assets, priority should be given to allocating adequate funds for maintenance of the most important components of the existing capital stock.⁵

Thirdly, while almost all of Tajikistan's existing power generation capacity is in the public sector, the government should leave investment in new hydropower projects to the private sector. The investment costs of potential hydropower projects far outstrips government's borrowing capacity. Moreover, the generation and export of electricity is not a public good which needs to be provided by the government. It is a commercial enterprise which can be undertaken by the private sector which is more likely provide efficient management than government.⁶ As discussed in section 7, attracting private investment into hydropower projects will require reform of the domestic tariff

⁵ This is a message which should also be taken on board by Tajikistan's donors, who have allocated most of their aid to the construction of new capital assets rather than funding current expenditures.

⁶ Government will make a contribution to the capital of the two major hydropower projects currently being planned in the form of existing assets which were put in place during the Soviet era when construction of these two projects began, before it was abandoned when the Soviet Union broke up.

structure to eliminate the QFD and ensure the commercial viability of sales to the domestic market.

Fourthly, the key policies to promote private sector investment in marketable goods and services do not entail major public spending programs. Instead the priority should be to maintain macroeconomic stability, to support the development of an efficient and competitive financial sector and to reduce the excessive regulation of the private sector and create a transparent and level playing field for all private investors.

Fifthly, the business climate will be improved by reforming tax administration so that tax liabilities are determined in a transparent manner according to the dictates of the tax code, and taxpayers are not subject to arbitrary decisions by tax officials. The priority should be to introduce modern principles of tax administration, involving self-assessment by taxpayers combined with risk based auditing by trained tax auditors (Harrison et al, 2005). The tax police should be abolished, for the reasons given in section 3.

5. The Efficiency, Composition and Level of Government Expenditure

The conclusions of sections 3 and 4 are that government should increase provision of basic social services which enhance human capital and also improve the maintenance of existing public capital assets. Fiscal space for these priority expenditures could, in principle, be created by improving the technical efficiency of expenditures and through reallocating funds within the budget from low to high priority expenditures.

Because of the structure of the budget and the weaknesses in the budget process, significant efficiency gains could be generated by improving allocative efficiency. First, budget allocations in Tajikistan are still heavily influenced by those which pertained during the Soviet era, which were heavily biased towards capital intensive technologies, highly centralized service provision and very rigid expenditure structures; for example, the health service is overly specialized, segmented and hierarchical with a bias in favor of secondary and tertiary health care and against primary health care. There are an excessively large number of health facilities in the country, around 2,800, many of which cannot be adequately staffed, supplied with

necessary inputs such as medicines, or properly maintained. In the education sector, employee compensation consumes 83% of the recurrent expenditure in the local budgets, from which most schools are funded, leaving insufficient funds for teaching materials and essential classroom maintenance.

Secondly, the budget process in Tajikistan and the technical capacities of budget planners are ill suited for aligning expenditure allocations with strategic objectives or evaluating the costs and benefits of competing expenditure demands. There are no clear institutional mechanisms to translate expenditure policy objectives into budget estimates during the annual budget process. The major constraint is the extreme fragmentation of the budget process, whereby over 100 key budget organizations (KBOs), including 17 local authorities, draw up and submit budget estimates directly to the Ministry of Finance (MOF). This process largely bypasses the line ministries, which have responsibility for formulating sector policies but have control over only a small fraction of the budget in their respective sectors, especially in education and health where most expenditures are covered by the local budget. As a result, line ministries cannot ensure that the sectoral spending priorities are actually reflected in the budget submissions of KBOs. These problems are compounded because the technical capacities within line ministries, let alone other KBOs, for formulating budgets other than in a purely mechanical manner is very limited. The result is a budget system in which most current expenditures are determined mechanically on the basis of input norms (e.g. number of classrooms in place), rather than on the basis of coherent spending priorities, which tends to perpetuate the existing allocations and prevent a shift towards more optimal allocations.

The allocation of capital expenditures, including those funded from the state budget as well as the donor funded Public Investment Program (PIP), is determined separately from the rest of the budget process, which means that capital expenditures cannot be integrated into broader sector expenditure plans, nor are the recurrent cost implications of capital projects adequately taken into consideration when planning these projects. Furthermore, capital budgeting suffers from many other deficiencies in the project planning and selection stages. There are no clear criteria for determining whether a proposed capital project accords with budgetary priorities. Ex-ante project appraisal is rudimentary at best, and does not include cost-benefit analysis. Hence

there is little reason to suppose that the capital budget is allocated in an efficient manner.

Unfortunately, it is difficult to quantify the scope for improving technical or allocative efficiency of expenditures because of the paucity and unreliability of data. For example, the measures of outcomes in key areas such as health and education are unreliable.

The composition of government expenditure

Tajikistan's government expenditures comprise the state budget and the PIP which is funded by external donors. Table 1 shows the breakdown of the 2006 state budget by functional classification. There is no functional breakdown of the PIP.

Government expenditure on health and education is low, at 1.3% and 4% of GDP respectively in 2006. Health expenditures command just 7% of the state budget, less than half of the international target of 15%. Government expenditure on health care amounts to the equivalent of about \$5 per capita, compared to the target set by the WHO of \$40 per capita.⁷ Current expenditure in the transport sector of the state budget, which includes all of the maintenance costs for roads, comprises only 0.5% of GDP, which is unlikely to be anywhere near sufficient to fund the road maintenance requirements, especially as a major backlog of essential repairs has built up.

Increased budgetary allocations to education, health and road maintenance would appear to be unavoidable if significant improvements in these services are to be achieved. The Health Finance Reform Strategy envisages government spending on health rising to 2.8% of GDP by 2015, an increase of 1.5% of GDP from the 2006 level (World Bank, 2005B: 39). It will probably be necessary to increase education spending by about 2% of GDP and to raise expenditures on infrastructure maintenance by about 1% of GDP: in total, therefore, this will require additional spending in these critical sectors of 4.5% of GDP, or about 25% of the state budget. In addition to this, expenditure of approximately 1.5% of GDP will be required over the

⁷ Compared to other CIS countries, Tajikistan spends about the same proportion of GDP on education but only just over half as much on health (Lorie, 2003: 26), although it is arguable that most of the CIS countries need to spend more on these sectors to reverse the decline in human capital which has occurred since the break up of the Soviet Union.

medium term to meet higher government utility bills and energy compensation mechanism payments as a result of planned electricity tariff rises, and to fund higher interest payments on external debt, bringing the total for additional priority and unavoidable expenditures to 6% of GDP, or around 33% of the existing size of the state budget. Can this be achieved through inter-sectoral re-allocations?

It will not be possible to re-allocate funds from the social protection sector, because the majority of expenditures are statutory payments such as pensions which are financed from social (payroll) taxes. This will leave approximately 50% of the state budget, amounting to about 9% of GDP, from which in principle it might be possible to effect re-allocations to the priority sectors. In practice, achieving such re-allocations will not be possible, because cuts of two thirds in expenditures in the non priority sectors would be required to free up budgetary resources of 6% of GDP for the priority sectors, together with the unavoidable expenditures on interest payments, utilities and energy compensation, and there will be political constraints to making cuts of this magnitude to two of the largest sectors of the budget, public administration and law enforcement. Realistically, therefore, if spending on the priority sectors of education, health and infrastructure maintenance is to be increased, an expansion of the state budget will be required.

Table 1

Composition of State Budget Expenditures by Functional Classification, 2006
Budget

	Percent of State Budget	Percent of GDP
State Budget Expenditures	100.0%	18.4%
Public admin bodies & foreign econ relations	12.0%	2.2%
Law enforcement structures	15.5%	2.8%
Social Sphere	49.5%	9.1%
education	21.8%	4.0%
health	6.9%	1.3%
social protection	12.4%	2.3%
compensations	2.4%	0.4%
culture and sports	3.7%	0.7%
other social services	2.2%	0.4%
Economic services	15.2%	2.8%
agriculture and agro-industrial complex	3.2%	0.6%
transport and communications	4.9%	0.9%
mining and construction	0.7%	0.1%
fuel and energy	1.7%	0.3%
utilities	4.4%	0.8%
other economic services	0.3%	0.1%
Other expenses	4.6%	0.8%
Interest payments	3.3%	0.6%
external	2.3%	0.4%
domestic	1.0%	0.2%
PIP spending from external sources		4.0%
Total expenditures including external PIP		22.4%

Source: Ministry of Finance

The level of government expenditure

The overall level of government expenditures is still relatively moderate, at 22% of GDP, so an expansion of the budget need not necessarily be sub-optimal in terms of efficient resource allocation provided that additional budgetary resources can be mobilized to fund it. However, a note of caution is warranted. The findings of the World Bank's ECA Regional Fiscal Study have important implications for the level of

public expenditure (Gray, Lane and Varoudakis, 2007). The study found that, in countries with poor governance, which include Tajikistan which is ranked second worse among 27 Eastern Europe and Central Asian countries in terms of government effectiveness, potentially productive public expenditures (defined as education, health, housing and economic affairs, including transport) have little positive impact on economic growth whereas unproductive public expenditures have a negative impact. Consequently, in countries with poor governance, large total public expenditures reduce growth, probably because they require high levels of taxation which distort incentives for work, investment and saving; hence growth is maximized by keeping the size of government small. The implications for Tajikistan are that increased government expenditures in the priority sectors will have to be accompanied by marked improvements in the quality of governance if these are to have a positive impact on economic growth.

6. Mobilizing Resources for Increased Government Expenditure

This section examines the scope for mobilizing additional budgetary resources to fund the priority expenditures identified above, from domestic revenues, donor grants and borrowing. Raising budgetary resources must be consistent with two essential policy objectives: first the need to maintain macroeconomic stability, and secondly, the need to maintain fiscal sustainability, which given the very limited scope for domestic borrowing, largely entails restraining the growth of external public debt to levels which are sustainable in the long run.

6.1 Domestic Revenues

While mobilizing greater domestic revenues is obviously a preferred option from the standpoint of minimizing the risks to macroeconomic stability and fiscal sustainability, this should not be done at the expense of increasing the tax burden on the economy in a manner which distorts incentives for saving, investment and work and for efficient resource allocation. Domestic revenues amounted to 18.8% of GDP in 2006. Key features of Tajikistan's tax system are also shared by other CIS countries, notably the importance of payroll taxes and the relatively small share of trade taxes in total revenue (Lorie, 2003).

Lorie (2003), investigating tax performance in CIS economies, regressed the tax revenue to GDP ratio on PPP GDP per capita for a large sample of developed, transitional and emerging market economies, with an additional regression which included a dummy variable for the OECD, graduating transition and CIS countries. The predicted tax revenue to GDP ratio for Tajikistan was 13.6% and 18.1% in the regressions with, and without, a dummy respectively. Tajikistan's tax revenue had reached 16.6% of GDP in 2006, hence it is not out of line with what would be expected based on the country's per capita income.

There are three potential sources of growth in domestic revenues as a share of GDP: First, the income elasticity of some tax handles; secondly, changes in tax policy (tax rates, thresholds, exemptions etc); and thirdly, improvements in tax administration.

Table 2

**Domestic Revenues, 2000 and 2006 Outturns and Projections for 2011 and 2016;
Percentage of GDP**

	2000	2006	2011	2016
Domestic Revenues	13.9	18.8	20.6	22.7
Tax Revenue	12.9	16.6	18.3	19.2
Impact of Tax admin reform	n.a.	n.a.	0.7	1.4
Taxes excluding tax admin reform	12.9	16.6	17.6	17.8
Individual Income tax	1.2	1.2	2.1	2.4
Profit Tax	0.6	0.6	0.6	0.6
Social Taxes	1.6	2.0	2.0	2.0
Sales tax (on exports)	3.3	0.6	0.6	0.6
VAT	2.5	7.4	7.8	7.7
Excise Duty	0.5	0.7	0.7	0.7
Customs Duty	1.4	0.9	0.9	0.9
Other Taxes	1.8	2.9	2.9	2.9
Non Tax Revenue	1.0	2.2	2.4	3.5
Revenue from HPP projects	-	-	0.1	1.3
Other	1.0	2.2	2.3	2.2

Source: 2000 and 2006, MOF and IMF; 2011 and 2016, authors' projections

Buoyancy and Income Elasticity of Taxes

Domestic revenues have been quite buoyant since 2000, rising by 4.9% of GDP in six years (table 2). This buoyancy is mainly attributable to VAT on imports, which adding 4.5% of GDP to tax collections, as result of a boom in imports (fuelled by remittances) and changes in the methodology for calculating the VAT from the origin to the destination principle for trade with CIS countries in the early 2000s (IMF, 2006: 10); i.e. the VAT on goods which are traded between Tajikistan and other CIS countries is levied by the importer (destination) instead of the exporter (origin). As Tajikistan has a large trade deficit with other CIS countries, the change in methodology for applying the VAT served to greatly expand the VAT base.⁸

The continued buoyancy of the tax system mainly depends on the extent to which VAT on imports continues to grow as a share of GDP. The only other tax handles to have displayed any buoyancy are the social taxes but these are earmarked for pensions. The natural income elasticity of individual income taxes has been dampened by their very low marginal rates. But it seems unlikely that VAT on imports will continue to be buoyant. Imports are already high as a share of GDP, especially for a landlocked country, and so will probably not rise further. The main factor that led to the buoyancy displayed by VAT on imports during the 2000s, the change in the methodology for computing the VAT, is a one off effect which will not be repeated.

Changes in Tax Policy

What scope is there for raising more tax revenue through tax policy changes without creating distortions to resource allocation which would impede growth, which requires that tax rates should be moderate and not out of line with international levels? Corporate profits are currently taxed at 25%, a rate which is in line with the unweighted average corporate profit tax for CIS countries and the transition countries of Eastern Europe (Lorrie, 2003: 38). Hence this rate should not be raised if Tajikistan wants to create a regionally competitive tax environment for business.

Personal income tax (PIT) rates are low. The current top marginal rate of 13% is much lower than the equivalent in other CIS countries, which ranges from 20% to

⁸ Levying VAT on the basis of the origin of imports was common to all CIS countries for their intra-CIS trade, but most have now switched to the destination basis.

35% (Summers and Baer, 2003: 7). Less than 5% of labor income was collected in personal income taxes in 2004, which is attributable to both the schedule of low rates and the fact that the incomes of a large proportion of workers fall below the threshold at which tax begins to be paid. Nevertheless it should be possible to increase the average PIT collection to about 10% of labor income by raising the top marginal rate to 25% and levying a rate of 10-15% on average incomes, which would generate additional revenue of about 1% of GDP. Raising PIT rates could also make the personal income tax more income elastic, because the schedule of taxes will become more progressive. The top marginal PIT rate should be set at the same level as that of the corporate income tax rate, in line with international best practice, to remove the opportunity for the owners of small businesses to reduce their tax liabilities by shifting income from profits to their own salary. There is also a case on equity grounds for raising the top marginal rate of PIT.

VAT is the single most important tax handle, but the rate is already 20% (and is effectively 22% because of the road user tax which is also levied on the VAT base). This is at the high end of VAT rates worldwide, so an increase in the rate is unadvisable.

Customs duties rates are relatively low: there are seven rates with a range of between 0% and 15%. Moreover, although imports are high as a share of GDP, the customs tax base is much narrower because around three quarters of all imports originate in CIS countries with which Tajikistan has signed free trade agreements. Hence any increase in customs tariffs would apply to a minority of imports which would limit its potential for revenue generation, as well as distorting the pattern of trade.

Tax Administration

Improvements in tax administration offer the greatest scope for enhancing domestic revenue. Some progress has already been made in reforming tax administration. The tax department has been restructured along functional lines and a Large Taxpayer Unit (LTU) set up. New tax and customs codes were introduced in 2005. Nevertheless, major weaknesses in tax administration have still to be rectified. The priority for tax administration reform should be to introduce modern tax

administration practices backed up by computerization.⁹ Tax officials should stop attempting to manually verify every tax return, and instead adopt the principle under which taxpayers are expected to comply voluntarily, through self-assessment. The auditing system needs to be strengthened, with better trained auditors undertaking audits selected on the basis of greatest risk. The law should be revised to enforce the quoting of a Taxpayer Identification Number (TIN) on all invoices. Efficiency in tax administration can be enhanced by the introduction of IT systems for taxpayer registration and accounting and core administration functions.

Over the longer term the structure of the tax department should be re-organized to reduce the number of small tax offices in the regions which play a marginal role in tax collection.¹⁰ Large taxpayers should be handled by the LTU, which needs strengthening. Model tax inspectorates should be established in each of the three regions to handle medium sized taxpayers. The closure of small offices, computerization plus a change in working practices will then allow the number of officials employed by in tax administration to be reduced by at least 50% (i.e. from the current level of around 1600 to 750). This would enable salaries for the remaining staff to be raised substantially which would provide better incentives to attract and retain higher caliber staff and reduce incentives for corruption. The customs department can also be strengthened through the upgrading of facilities and infrastructure at border posts, developing application systems and procedures to support modern customs practices and training customs officers (Harrison et al, 2005).

How much additional revenue could tax administration reforms generate? Although it is difficult to be precise, based on the experience of other developing countries which implemented major reforms to tax administration, an increase in tax revenue of around 8-10% should be attainable over the long term.¹¹

⁹ These paragraphs are based on the recommendations for reform of an ADB funded tax administration reform project and the recommendations in Harrison et al (2005).

¹⁰ The geographical fragmentation of the tax system reflects the system of financing local government budgets, whereby a proportion of taxes collected locally is retained by local authorities (and usually supplemented by transfers from the center). The rationalisation of tax offices, therefore, must be linked to changes in the financing of local government budgets.

¹¹ The Asian Development Bank's Tax Administration Modernisation project is expected to boost revenue from domestic taxes by 5% in the year following implementation and by a further 2.5% in the subsequent three years (ADB, 2007: 30).

Long-term revenue projections

Table 2 provides projections for domestic revenues as a share of GDP in 2010 and 2015.¹² The main assumptions underlying these projections are as follows. First, with increased marginal tax rates, the tax collected from individual income tax as a share of labor income rises from the current level of slightly over 4% to 8% by 2011, and by a further 0.25% of labor income per year thereafter, to reflect what should be the natural elasticity of this tax handle. Formal sector labor income as a share of GDP is assumed to be constant. Secondly, VAT is boosted slightly by the net impact of higher electricity tariffs. Thirdly, other tax handles grow broadly in line with nominal GDP, before the impact of tax administration reforms. Fourthly, the gains from tax administration reforms are projected at a cumulative 1% of total tax revenue per year starting in 2008, hence by 2006 they boost tax revenues by 9%. Fifthly, the revenue projections also include the projected revenue earned from government's capital investment in the two major hydropower projects, and the surplus in the form of taxes or royalties which can be earned from electricity exports. The net impact is that domestic revenues increase by 3.9% of GDP, from 18.8% of GDP in 2006 to 22.7% in 2016.

Grants

Donor grants to the government budget have been low, although project grants may be under-reported. Excluding the MDRI debt relief received in 2006, grants to the budget amounted to 1.8% of GDP on 2006. The majority of donor grants are disbursed to agencies outside the government budget, such as community based organizations, in part because of concerns about fiduciary weaknesses in the budget.¹³ Future levels of grant aid to the budget, the form of budget support and project aid, could be boosted if donor governments increase their overall aid to Tajikistan, in line with commitments made at international fora to expand aid in real terms to the poorest countries, and/or if a larger share of donor aid were to be channeled to the government budget.

¹² A detailed explanation of the assumptions underlying these projections can be found in World Bank (2006: chapter 3).

¹³ An estimated \$114 million of grant aid from donor organizations was disbursed outside the budget in 2005 compared to \$45 million of grants (excluding MDRI debt relief) disbursed to the budget in the form of both budget support and project aid. The estimate for the non budget grants is a minimum because data were not available from all donors.

Table 3**Budget Resources for Primary Expenditure: Domestic Revenues, Grants, Borrowing and Interest Payments; 2006 and Projections for 2007-11 and 2012-16**

Percentage of GDP

	2006	2007-11 average	2012-16 average
Domestic Revenue	18.8%	19.8%	21.8%
Grants	1.2%	2.0%	2.2%
Borrowing	1.1%	8.5%	3.0%
Net External Borrowing	1.6%	8.8%	3.2%
Disbursements	2.9%	10.0%	4.9%
Amortisation	-1.3%	-1.3%	-1.7%
Net Domestic Borrowing	-0.5%	-0.2%	-0.2%
Privatisation Receipts	0.5%		
Interest Payments	0.5%	0.9%	1.0%
Budget Resources for Primary Expenditure	21.1%	29.5%	25.9%
NPV External PPG debt/GDP	23%	41%	40%
NPV External PPG debt/exports	99%	174%	163%

Notes, grants and domestic borrowing exclude the MDRI debt relief in 2006

Source: 2006, IMF, 2007-11 and 2012-16 are author's projections

It is very difficult to make any quantitative projections of the volume of budget grants over the long term, because the range of possible outcomes is so large. At the low end of the range, Tajikistan might receive no increase in grants, because donors remain unconvinced that fiduciary standards are improving sufficiently and/or because Tajikistan contracts more loan finance from non traditional lenders, thereby reducing the perceived need for more grant aid. At the other end of the range, grants could increase several fold, possibly to around 5% of GDP, as donors both increase grant aid to Tajikistan as part of a more general expansion of development assistance to low-income countries and channel a much larger share of their grant aid to the government budget. The latter will clearly require improvements in PFM to strengthen and make more transparent the budget process and to improve the allocation of expenditures, especially in those sectors which can contribute to meeting

the MDGs. The assumption we have used here is that donor grants will increase by 10% a year in dollar terms, using the 2007 budget projection as a base, which is consistent with the commitment made by the G8 countries in 2005 to increase their aid to poor countries by 60% by 2010. We assume that the 10% growth in grants will be sustained through to 2016. As shown in table 3, the projected average level of budget grants during 2007-11 is 2% of GDP and that during 2012-2016 is 2.2% of GDP. This represents an increase in budgetary resources of approximately 1.4% of GDP from the 2006 level. However, these projections are unavoidably highly speculative and depend to a large extent on decisions which are outside the control of the Tajikistan government.

Domestic Borrowing

The main constraint on government domestic borrowing is the need to maintain macroeconomic stability without crowding out private sector borrowing from the banking system. Government's domestic debt stock is small, at around 4% of GDP, hence the sustainability of the domestic debt stock is not the binding constraint on domestic borrowing. Given the low level of domestic debt, government could issue more domestic debt and remain solvent, but the issuance of more government debt faces three constraints: the very narrow domestic monetary system (broad money was only 8.5% of GDP at the end of 2006), the high level of dollarization of the banking system (foreign currency deposits are 69% of total bank deposits), and the lack of significant non bank financial institutions. The poorly developed domestic financial sector also constrains the use of alternative macroeconomic instruments to create fiscal space. If government were to fund a more expansionary fiscal policy by borrowing from the central bank the latter would then face the need to sterilize the base money thus created, but its ability to do so is constrained by the same characteristics of the domestic financial system which restrict the scope for government borrowing from the domestic market.

To derive projections of domestic borrowing consistent with macroeconomic stability we assume that only borrowing from the central bank and commercial banks is possible: this is because the non bank financial sector is too small to hold any significant amount of government debt. Borrowing from the central bank is driven by the imperative of controlling reserve money growth and accumulating foreign

reserves.¹⁴ We assume that the velocity of circulation of reserve money will fall at 2.5% per year. We assume that foreign reserves increase at the same rate as imports, thereby maintaining the foreign reserve to import cover constant, while foreign exchange liabilities, valued in current dollars, remain constant. To meet these targets, the central bank's lending to the government must be an average of negative 0.4% of GDP per annum during 2007-16.

The constraints on government borrowing from the commercial banks are the growth of their liabilities and the extent to which government wants to avoid competing with the private sector and public enterprises for the very limited pool of commercial bank credit. Commercial bank liabilities are mainly deposits, but more than two thirds of deposits are foreign currency denominated deposits and we assume that commercial banks will not use foreign currency deposits to fund purchases of government debt because of the currency mismatch that this would entail. We assume that government will restrict its net borrowing from commercial banks to 30% of the increase of domestic currency deposits, thereby leaving the remaining 70% of the increase of domestic currency deposits to fund lending to the private sector and public enterprises, as well as holdings of cash reserves and other assets. We assume that the velocity of circulation of Somoni deposits will fall by 5% per annum. Government borrowing from the commercial banks is positive but very small, averaging only 0.1% of GDP per year during 2007-2016. Net domestic borrowing, the sum of net borrowing from the central bank and commercial banks, is slightly negative over the next 10 years, averaging 0.2% of GDP per annum (see table 3). This is slightly larger than the average so far during the 2000s (i.e. the savings are slightly less) but the amount of fiscal space created is very small.

External borrowing

The major constraint on external borrowing is the need to maintain external debt sustainability, rather than the availability of loans from foreign creditors. The Government's net external financing will increase dramatically over the medium term as a result of its contracting of a \$604 million loan for infrastructure projects from

¹⁴ The detailed assumptions can be found in World Bank (2007: chapter 3).

China. In addition Government has guaranteed more than \$300 million in external loans to cotton traders. Net external financing is projected to rise to around 14% of GDP in 2007 and 2008 before falling to 11% of GDP in 2009. This will lift the NPV of Tajikistan's PPG external debt over at least two of the five thresholds at which debt is deemed sustainable under the IMF/IDA Low-Income Country Debt Sustainability Assessment Framework.

Our projections for external financing are derived using the following methodology. For the 2007-2011 period we adopt the projections made in the most recent DSA, which was completed in January 2007 (IMF & World Bank, 2007). External loan disbursements and amortization in this period mainly reflect the implementation of loan agreements already signed. We make our own projections for 2012-16. After 2011 there is more scope for loan disbursements to vary, as these will involve loan contracts not yet signed. As the purpose of this chapter is to assess the scope for fiscal space which is consistent with sustainable borrowing, our projections are based on the assumption that the government will aim to bring back, over the long term, its external debt indicators to levels which do not exceed the thresholds at which external debt is deemed unsustainable, by restricting new external borrowing. Hence, given the projected loan repayments and the grant element of the loans, we construct a profile of loan disbursements which ensures that all sustainability indicators are met by 2016.

The projected net external financing over the medium term will lift the NPV of debt to both GDP and exports above the sustainability thresholds, although the indicators will start to decline after 2009. The NPV of debt to exports is the most problematic, as this exceeds the threshold by the largest margin. Under our projections, this indicator falls back to the threshold of 150% by 2016. The NPV of debt to GDP returns to the threshold earlier, by 2014.

Chart 2

External loan disbursements as percent of GDP and the implied path of the NPV of PPG external debt to exports; 2005-2016

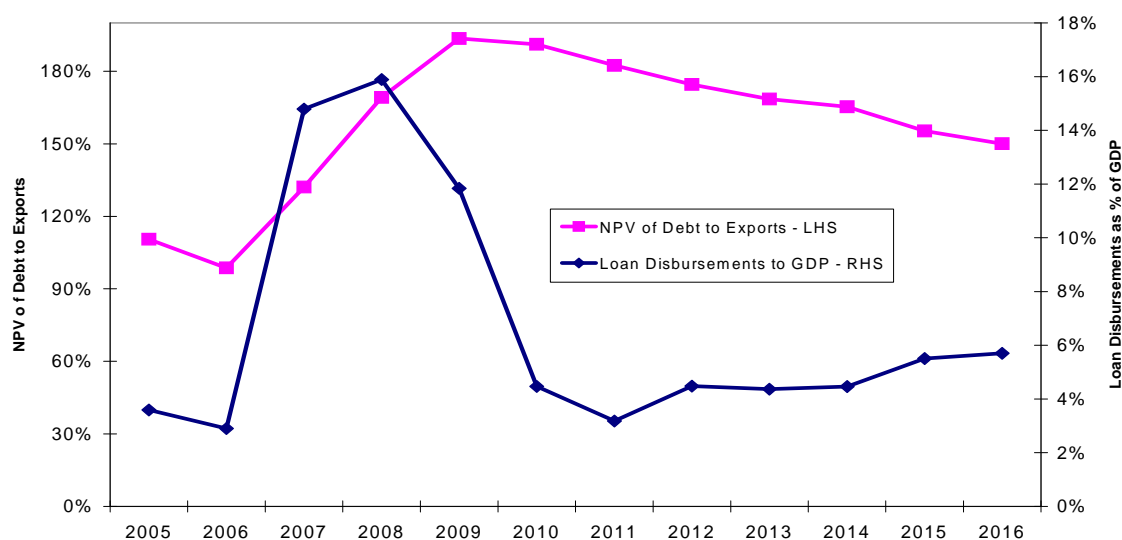


Chart 2 presents the profile of external loan disbursements and the NPV of debt to exports from 2005 to 2016. As can be seen from the chart, once the projected increase in external loan disbursements during 2007-09 has been absorbed, there is very little scope left for any further increase in external borrowing without breaching the debt sustainability ceilings. The sustainable level of gross public external borrowing is only about 5% of GDP, and even this level of borrowing would be unsustainable if the country were to suffer a major shock to GDP growth or export growth. This is one of the key policy messages of this paper: the government cannot solve its budgetary resource constraints through higher external borrowing on a sustainable basis, even if external lenders are willing to extend it more credit in the medium term, because that will jeopardize long-term debt sustainability.

Summary of resource envelope projections

The projected budgetary resources for primary expenditures are shown in table 3. We have not included privatization receipts, because these resources are too uncertain and are also not sustainable in the long term. Compared to 2006, when primary

expenditure totaled 21.1% of GDP, budget resources for primary expenditure are projected to be 8.4% of GDP higher on average during 2007-11, mainly because of higher capital expenditure funded by external borrowing, and 4.8% of GDP higher during 2012-16. Although the budget resource envelope is smaller in 2011-16 than in the preceding five year period, it is more sustainable, because the expansion is driven by increased revenues rather than unsustainable levels of external borrowing. Moreover, because increased revenues are not earmarked for specific project expenditures, after 2011 there will be more flexibility in the budget to allocate resources to priority recurrent expenditures.

7. Tackling the Quasi Fiscal Deficit

The electricity sector has consistently incurred large quasi fiscal deficits in serving the domestic market.¹⁵ The QFD in the sector is the difference between the actual revenue collected in cash by Barki Tajik, the state owned electricity utility, and the revenue which would be collected if it set electricity tariffs at levels sufficient to cover the long run average incremental cost (LRAIC) which is used as a proxy for long run marginal cost, and reduced its technical and collection losses to levels which are in line with international norms (World Bank, 2005C).¹⁶

The electricity sector QFD arises from three sources. First, Barki Tajik incurs technical and commercial losses which in 2005 amounted to 17% of electricity supplied to the domestic market, as a result of a loss of electricity in the distribution system, theft of electricity, defective metering and inappropriate use of norm based billing for customers without meters, compared to a norm for technical and commercial losses of 10%. Evaluated at the LRAIC, the excess technical losses amount to \$25 million in 2006. Secondly, the LRAIC is estimated at 2.3 cents per KWh in 2006 prices, compared to the average tariff charged by Barki Tajik of 0.6

¹⁵ Energy sector QFDs are a feature of most CIS countries, for the similar reasons as in Tajikistan. In 2002, Azerbaijan, Kyrgyz Republic, Tajikistan and Uzbekistan all had energy sector QFDs of close to 10% of GDP or higher (Saavalainen and Berge, 2006).

¹⁶ The gas industry also incurred QFDs in recent years, estimated at 1.3% of GDP in 2002 (Saavalainen and Berge, 2006: 9), but these have now been eliminated through tariff increases.

cents per KWh in 2006. The losses arising from charging average tariffs which are not much more than a quarter of the LRAIC are projected to reach \$210 million in 2006. Thirdly, Barki Tajik incurs losses because only 67% of the electricity bills it issues to its customers are actually paid in cash, compared to the international norm of 98%. These losses amount to a further \$27 million. The total QFD, therefore, is estimated at \$262 million, or 9.3% of GDP, in 2006.

Unless it is eliminated, the electricity sector QFD will have a serious detrimental impact on the prospects for economic growth and public finances in Tajikistan. Although the QFDs have, to date, not been subsidized directly through the government budget,¹⁷ this is not sustainable in the long run, and some form of government subsidy will eventually become inevitable unless the QFDs are eliminated, because Barki Tajik will not be able to fund the investment and associated operational and maintenance costs which are required to rehabilitate the electricity transmission and distribution system and keep it functioning at an adequate standard. Consequently either the costs of the QFD will have to be borne from the government budget, thereby reducing fiscal space by an equivalent amount, or the electricity supply system will deteriorate, reducing the supply and reliability of electricity to customers, which will inevitably have a negative impact on economic growth. Clearly the government budget cannot accommodate subsidies of more than 9% of GDP (which would require cutting primary expenditures by half), but neither can the economy afford a collapse of the electricity supply.

To eliminate the QFD in the electricity sector it will be necessary for Barki Tajik to reduce its technical and commercial losses and its billing losses, through better metering and enforcement of payment of bills, for example, and to raise the average tariff to the LRAIC. The latter will involve domestic consumers, commercial consumers and government all paying much higher electricity tariffs. The costs to the budget of higher government electricity bills and the costs of compensating low income electricity consumers through the Energy Compensation Mechanism (ECM) will amount to more than 1% of GDP. Nevertheless, raising electricity tariffs to the LRAIC of supplying electricity cannot be avoided. Moreover, unless the finances of

¹⁷ An exception was in 2001 when Barki Tajik defaulted on tax payments because of liquidity constraints.

Barki Tajik are put on a sound footing through tariff reform and loss reduction, it is very unlikely that private investment can be attracted into new hydropower generation projects, because some of the output of the HPPs will be sold to Barki Tajik for domestic consumption.

8. Implications for the Design of Fiscal Policy

Since the late 1990s fiscal policy has played a crucial role in supporting the economic recovery in Tajikistan through the macroeconomic stabilization of the economy. While it crucial that fiscal policy continues to provide the foundation for macroeconomic stability in the future, fiscal policy must play a greater role in strengthening the supply side of the economy, in particular through the delivery of key public services which can complement private investment and enhance human capital.

The priorities for public expenditure should be improving public services for education and health, both of which have deteriorated since independence, and providing adequate maintenance for the most important components of the public infrastructure. Building new public infrastructure should not be an expenditure priority for the government because Tajikistan is already endowed with an extensive stock of public infrastructure assets which it inherited from the Soviet era and which is too large to be properly maintained with the budgetary resources available to the government. While the economy would benefit from major investments in hydropower generation, mainly for export to neighboring countries, these are commercially viable projects rather than public goods and this investment should be led by the private sector to ensure that these projects are managed efficiently. Moreover the magnitude of resources required for the hydropower generation projects far outstrips the borrowing capacity of government.

There should be some scope for expanding public service provision in the priority areas of education, health and infrastructure maintenance by improving the efficiency of government expenditure. Government expenditures are characterized by substantial technical and allocative inefficiencies, although it is the difficult to quantify the

magnitude of this. The major priorities for public financial management reform are to improve the budget resource allocation system, by introducing sector based budgeting as a part of the Medium-Term Expenditure Framework in the major sectors of the budget, and to strengthen the efficiency of budget implementation through reforms to procurement, payroll management, financial reporting and auditing, etc. But this will entail a very difficult set of institutional reforms which are likely to take a long time before substantial benefits can be derived. Consequently it does not appear plausible that major improvements in public service provision in the priority areas can be achieved through increases in the efficiency of government expenditures alone, except in the very long term. Therefore more budgetary resources will have to be allocated to the priority expenditure areas.

In 2006 Government allocated, from the state budget, expenditures equivalent to 4% and 1.3% of GDP to education and health respectively, while expenditures on the maintenance of the transport infrastructure were less than 1% of GDP. Additional resources of about 4.5% of GDP will probably be needed to fund these priority areas of expenditure, to which must be added additional expenditures of around 1.5% of GDP on what are largely unavoidable expenditures such as higher utility bills and interest payments, which together amounts to more than a third of the size of the existing state budget. It is not realistic to expect that these priority expenditures can be funded from reallocations from within the existing budget alone, because the cuts required to the non statutory expenditures (excluding pensions) would be very severe. Therefore an expansion of the budget will be required to accommodate all of the additional expenditures in the priority areas.

Over the long term, domestic revenues offer the best prospects for mobilizing more budgetary resources. Although there is only limited scope for raising more tax revenue through tax policy changes – an exception would be to raise marginal personal income tax rates – reforms to tax administration which is characterized by major weaknesses, could generate a significant gain in tax revenue, while the government budget could also be boosted by revenues earned from new hydropower projects. Although domestic revenue gains in the medium term will be quite modest, gains of 4% of GDP could be realized in the long term. The tax burden on the private sector is not excessive in terms of the aggregate tax level but tax administration

imposes a regulatory burden, creates uncertainty and opportunities for corruption. One of the priorities for tax reform is to create a more market friendly system of tax administration based on self-assessment with effective audit and enforcement.

Donor grants have not made a major contribution to the government budget. Although Tajikistan has received quite a large amount of donor grant aid, equivalent to around 4-5% of GDP in the 2000s, the majority of this has not been disbursed to the government budget, partly because of donor concerns about poor fiduciary standards in government. The budget could benefit from larger inflows of grant aid if Tajikistan were to receive more aid from donors and/or if donors were to channel more of their aid to the government budget, but the latter will require marked improvements in PFM to assure donors that their aid funds will be well spent. Projecting the long-term trends in donor grants is very problematic, but it is probably realistic to expect a modest increase in grant aid to the budget, in line with the commitments made by major donors to increase their aid budgets for the poorest countries, which will raise budget grants to around 2% of GDP.

Although the current size of domestic debt is not a threat to government solvency, domestic borrowing is constrained by the imperative of maintaining macroeconomic stability. The domestic financial system is simply too shallow to accommodate any but the smallest of government borrowing requirements, hence government domestic borrowing will inevitably either crowd out private sector credit from the commercial banks or lead to growth in the money supply if funded from the central bank. Therefore, government cannot expand its budget envelope by increasing its domestic borrowing.

Maintaining external debt sustainability is the major constraint on external borrowing. The government has contracted new loans, notably from China, which will raise disbursements of external debt to 10% of GDP on average during 2007-11, but this level of borrowing is not sustainable over the long term. New disbursements will have to fall back to an average of 5% of GDP in the following five years if the NPV of the external debt is to be brought back into line with the sustainability thresholds set out in the IMF/IDA Low-Income Countries Debt Sustainability Framework.

Combining the projections for domestic revenues, grants and borrowing indicates that budget resources for primary expenditures are projected to increase, compared to the level in 2006, by 8% of GDP on average during 2007-11 and by 5% of GDP on average during 2012-16. However, a large part of the increase during 2007-11 is attributable to external borrowing for infrastructure projects and is not therefore available for funding the priority current expenditures. It is only in the 2012-16 period, when more than half of the increase in the budget envelope is attributable to higher domestic revenues, that the budget resources for current expenditure priorities will expand significantly.

A major threat to both the sustainability of public finances and the prospects for future growth is the quasi fiscal deficit (QFD) incurred by the electricity sector, which is estimated at 9% of GDP in 2006. Eliminating the QFD will require substantial rises in electricity tariffs (which will also have an impact on the government budget) as well as loss reduction measures by Barki Tajik. If the QFD is not eliminated, Barki Tajik will not be able to undertake the essential maintenance and rehabilitation of the electricity transmission and distribution network, with disastrous consequences for the availability and reliability of electricity supply, unless these costs are borne by the government budget, in which case they will crowd out expenditures for essential public services and/or destabilize public finances.

While the resource envelope projections presented in this paper indicate that it should be possible for government to mobilize sufficient resources to increase primary expenditures substantially over the next decade it is necessary to sound a note of caution. The experience of the transition economies of Europe and Central Asia suggests a clear link between the benefits or costs of higher government expenditure and the quality of governance. Higher total government expenditure tends to depress economic growth in countries with poor governance, and even expenditures on what should be productive sectors such as education appear to have little impact on growth (Gray, Lane and Varoudakis, 2007). If Tajikistan is to benefit from an expansion in the size of the budget to accommodate the priority expenditures of education, health and infrastructure maintenance, this must be accompanied by major improvements in the quality of governance. The key areas where governance must be improved include PFM, notably in the budget process, to enable a more rational and coherent allocation

of scarce budget resources to be achieved, in the scope and quality of budget reporting and auditing, and in tax administration. Moreover, failure to restrain public borrowing and to implement reforms in the electricity sector would pose serious risks to fiscal sustainability and to the country's prospects for economic growth and poverty reduction over the medium to long term.

References

Asian Development Bank (2007), "Republic of Tajikistan: Tax Administration Modernization and Governance Enhancement", Technical Assistance Consultant's Report.

De Broeck, Mark and Vincent Koen (2000), "The Great Contractions in Russia, the Baltics and the other countries of the Former Soviet Union: A View from the Supply Side", Working Paper WP/00/32, International Monetary Fund.

Easterly, William and Stanley Fischer (1994), "The Soviet Economic Decline: Historical and Republican Data", Policy Research Working Paper 1284, World Bank.

Estache, Antonio, Marianela Gonzalez and Lourdes Trujillo (2006), "Government Expenditures on Education, Health and Infrastructure: A Naïve Look at Levels, Outcomes and Efficiency", World Bank.

Gray, Cheryl, Tracey Lane and Aristomene Varoudakis (eds) (2007), *Fiscal Policy and Economic Growth: Lessons of Eastern Europe and Central Asia*, World Bank.

Harrison, Graham, Esil Martinsen and Sundar Somodi (2005), "A Program for Tax Administration Reform", Technical Report Fiscal Affairs Department, International Monetary Fund.

Herrera, Santiago and Gaobo Pang (2005), “Efficiency of Public Spending in Developing Countries: An Efficiency Frontier Approach”, mimeo, World Bank.

IMF (2006), “Republic of Tajikistan - Ex Post Assessment of Longer Term Program Engagement”, IMF Country Report 06/63.

Lorie, Henri (2003) “Priorities for Further Fiscal Reforms in the Commonwealth of Independent States” Working Paper WP/03/209, International Monetary Fund.

Matovu, John (2005), “Sources of Economic Growth” in Tajikistan: Selected Issues and Statistical Appendix, IMF Country Report No. 05/131.

Radev, Dimitar, John Zohrab, John Matovu and Sailendra Pattanayak (2005), “Public Financial Management and Treasury Reforms” Technical Report, Fiscal Affairs Department, IMF.

Saavalainen, Tapio and Joy ten Berge (2006), “Quasi Fiscal Deficits and Energy Conditionality in Selected CIS Countries”, Working Paper WP/06/43, International Monetary Fund.

Segura-Ubiergo, Alex, Alejandro Simone and Sanjeev Gupta (2006), “New Evidence on Fiscal Adjustment and Growth in Transition Economies” Working Paper WP/06/244, International Monetary Fund.

Summers, Victoria and Katherine Baer (2003), “Revenue Policy and Administration in the CIS-7: Recent Trends and Future Challenges”, paper prepared for the Lucerne Conference of the CIS-7 Initiative.

World Bank (2004A), “Central Asia: Regional Electricity Export Potential Study”. Europe and Central Asia Region, World Bank.

World Bank (2004B), “Trade and Transport Facilitation in Central Asia”

World Bank (2005A), “Republic of Tajikistan Poverty Assessment Update”, Report No: 30853-TJ.

World Bank (2005B) “Republic of Tajikistan: Health Sector Note”, Report No 29858-TJ.

World Bank (2005C), “Tajikistan Energy Utility Reform Review”.

World Bank (2005D), “Tajikistan: Trade Diagnostic Study” Report No 32603-TJ.

World Bank (2006), “Europe and Central Asia Infrastructure Study”.

World Bank (2007), “Tajikistan: Programmatic Public Expenditure Review”.